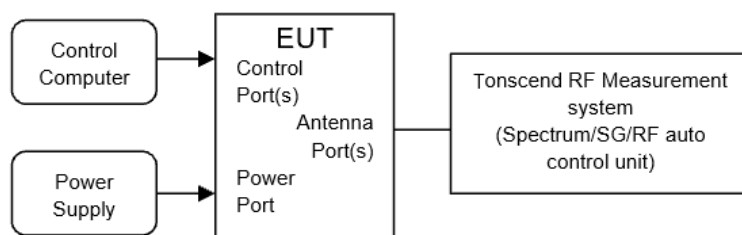


10. Duty Cycle

10.1. Block diagram of test setup



10.2. Limit

Just for Report.

10.3. Test procedure

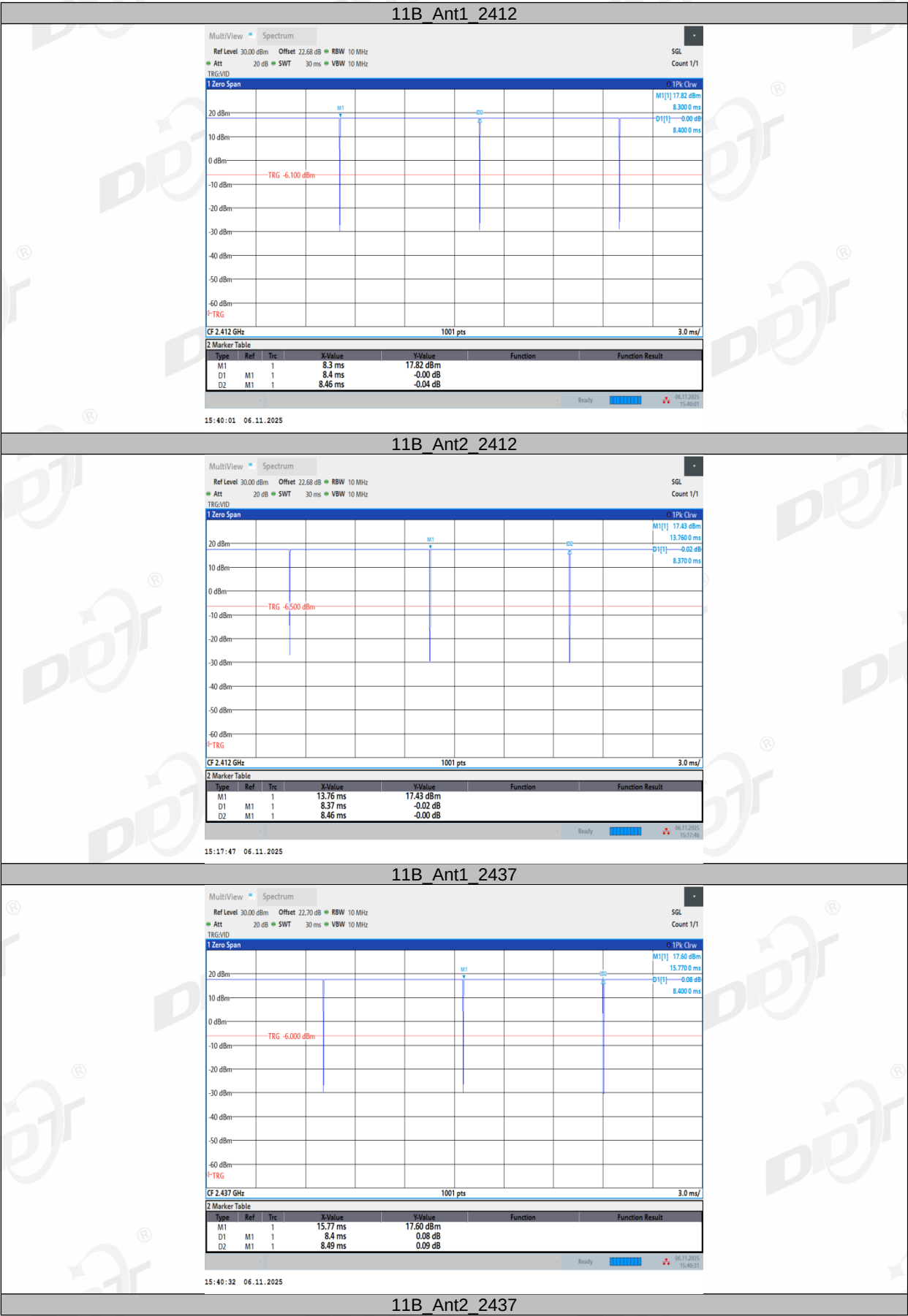
- (1) Connected the EUT's antenna port to the Spectrum Analyzer by suitable attenuator, The cable loss and attenuator loss have been put into spectrum analyzer as amplitude offset.
set the Spectrum Analyzer as below:
 - Centre Frequency: The centre frequency of the middle hopping channel.
 - Resolution BW: 10 MHz.
 - Video BW: 10 MHz.
 - Span: Zero span.
 - Detector: Peak.
 - Trace Mode: Clear Write.
 - Sweep: Video Trigger
- (2) When the trace is complete, measure the sending time of 1 burst and the duty cycle of 1 burst cycle.
- (3) Calculate dwell time follow below formula:
Duty cycle= Pulse's on time / Burst cycle

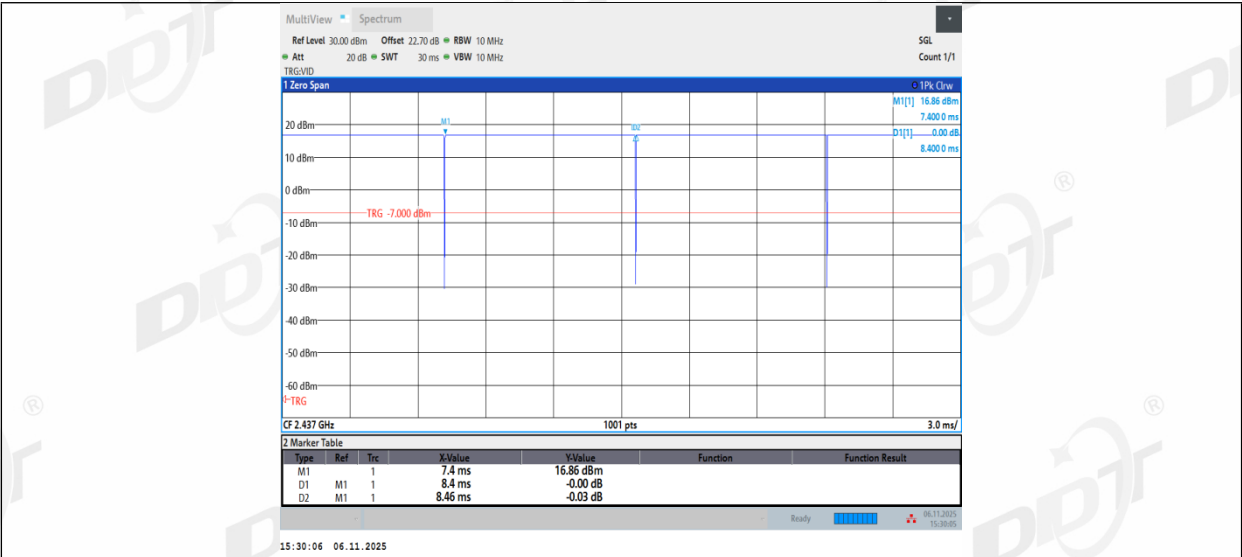
10.4. Test result

Test Engineer:	Huang Yanwen	Test Site:	RF Measurement system 4#
Ambient Condition:	23.8-26.9℃,41.2-45.6%RH	Test Date:	2025.10.30-2025.11.06
Test Power Supply:	AC 120V/60Hz	Sample Number:	S25082524-001

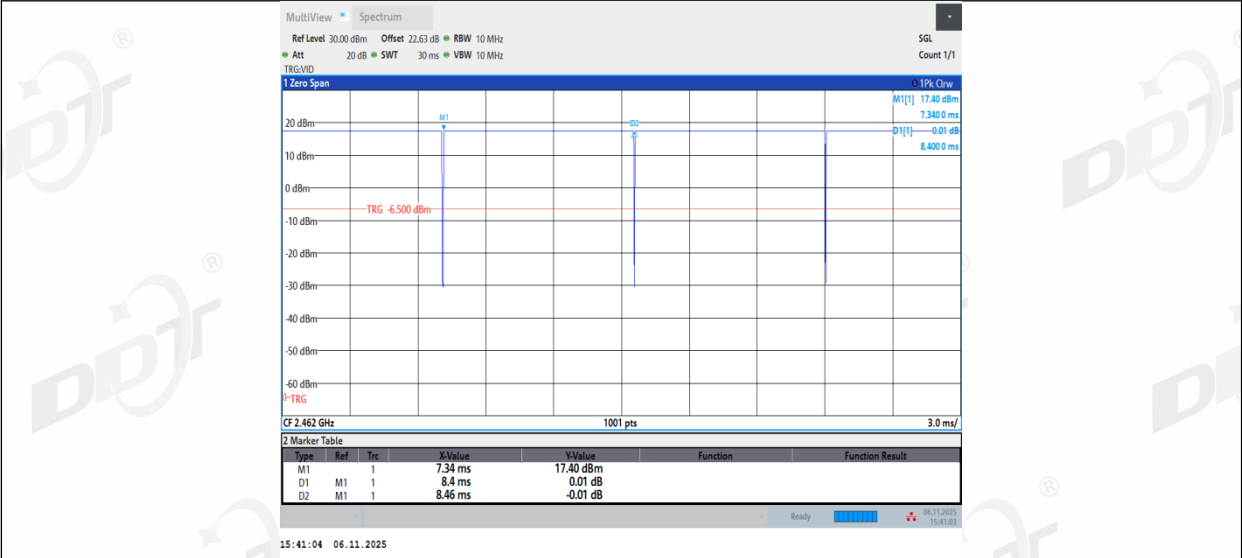
Test Mode	Antenna	Frequency [MHz]	Transmission Duration [ms]	Transmission Period [ms]	Duty Cycle [%]
11B	Ant1	2412	8.40	8.46	99.29
	Ant2	2412	8.37	8.46	98.94
	Ant1	2437	8.40	8.49	98.94
	Ant2	2437	8.40	8.46	99.29
	Ant1	2462	8.40	8.46	99.29
	Ant2	2462	8.37	8.46	98.94
11G	Ant1	2412	1.39	1.45	95.86
	Ant2	2412	1.39	1.45	95.86
	Ant1	2437	1.39	1.45	95.86
	Ant2	2437	1.39	1.45	95.86
	Ant1	2462	1.39	1.45	95.86
	Ant2	2462	1.39	1.46	95.21
11N20MIMO	Ant1	2412	0.67	0.73	91.78
	Ant2	2412	0.67	0.74	90.54
	Ant1	2437	0.67	0.73	91.78
	Ant2	2437	0.67	0.73	91.78
	Ant1	2462	0.67	0.74	90.54
	Ant2	2462	0.67	0.74	90.54
11N40MIMO	Ant1	2422	0.34	0.41	82.93
	Ant2	2422	0.34	0.41	82.93
	Ant1	2437	0.34	0.41	82.93
	Ant2	2437	0.34	0.41	82.93
	Ant1	2452	0.34	0.41	82.93
	Ant2	2452	0.34	0.41	82.93
11AX20MIMO	Ant1	2412	0.20	0.27	74.07
	Ant2	2412	0.20	0.27	74.07
	Ant1	2437	0.20	0.27	74.07
	Ant2	2437	0.20	0.27	74.07
	Ant1	2462	0.20	0.27	74.07
	Ant2	2462	0.20	0.27	74.07
11AX40MIMO	Ant1	2422	0.20	0.27	74.07
	Ant2	2422	0.20	0.27	74.07
	Ant1	2437	0.20	0.27	74.07
	Ant2	2437	0.20	0.27	74.07
	Ant1	2452	0.20	0.27	74.07
	Ant2	2452	0.20	0.27	74.07
11BE20MIMO	Ant1	2412	0.21	0.28	75.00
	Ant2	2412	0.21	0.28	75.00
	Ant1	2437	0.20	0.27	74.07
	Ant2	2437	0.21	0.27	77.78
	Ant1	2462	0.21	0.27	77.78
	Ant2	2462	0.21	0.27	77.78
11BE40MIMO	Ant1	2422	0.21	0.28	75.00
	Ant2	2422	0.21	0.28	75.00
	Ant1	2437	0.21	0.27	77.78
	Ant2	2437	0.21	0.27	77.78
	Ant1	2452	0.21	0.28	75.00
	Ant2	2452	0.21	0.28	75.00

10.5. Test graphs

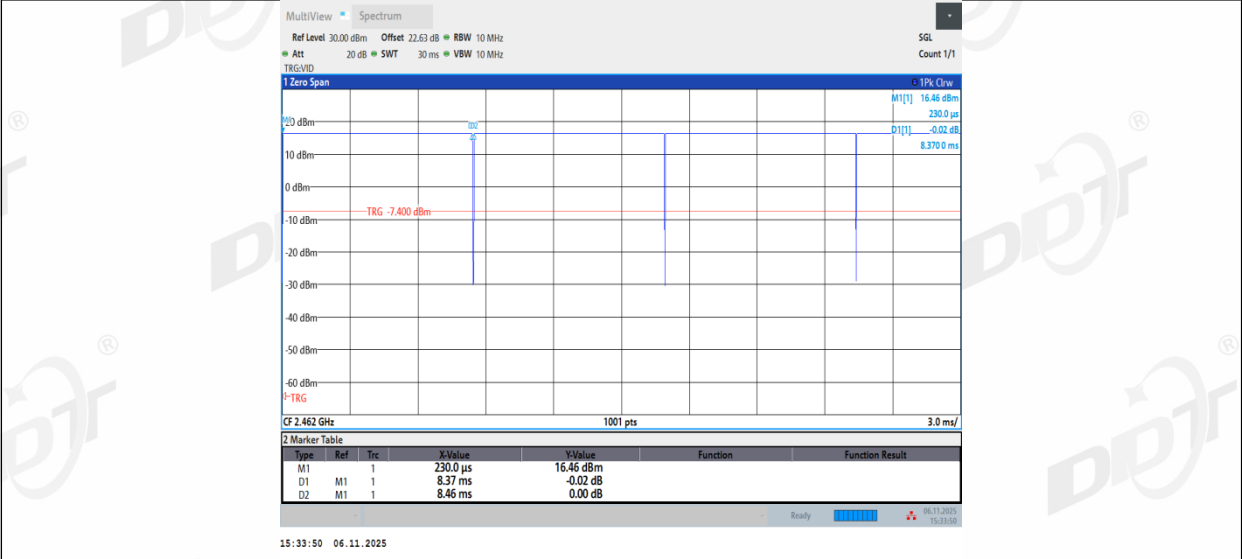




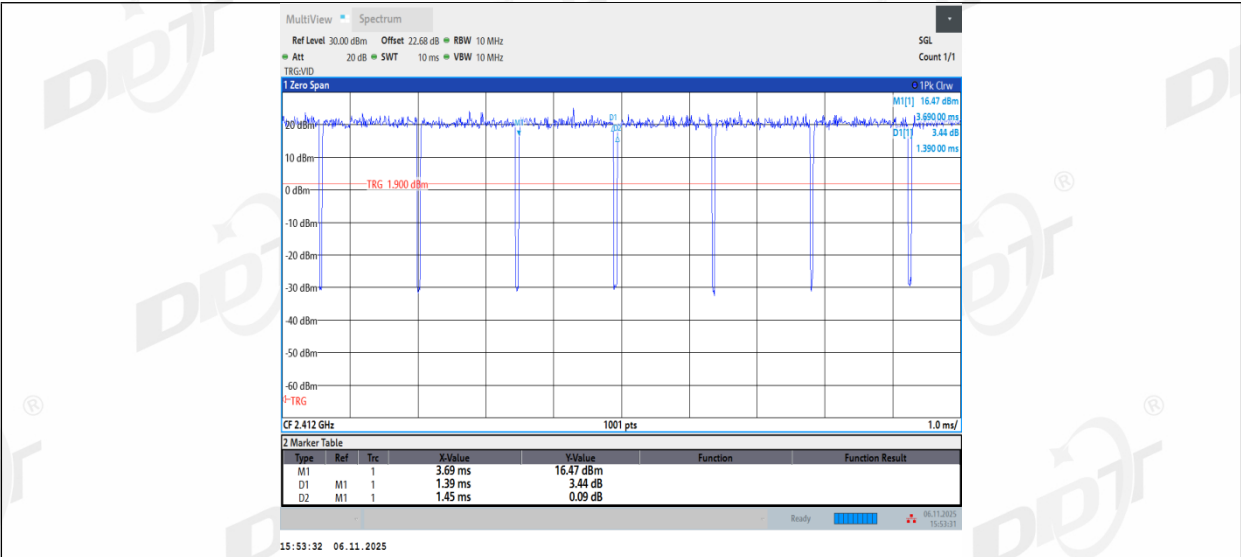
11B_Ant1_2462



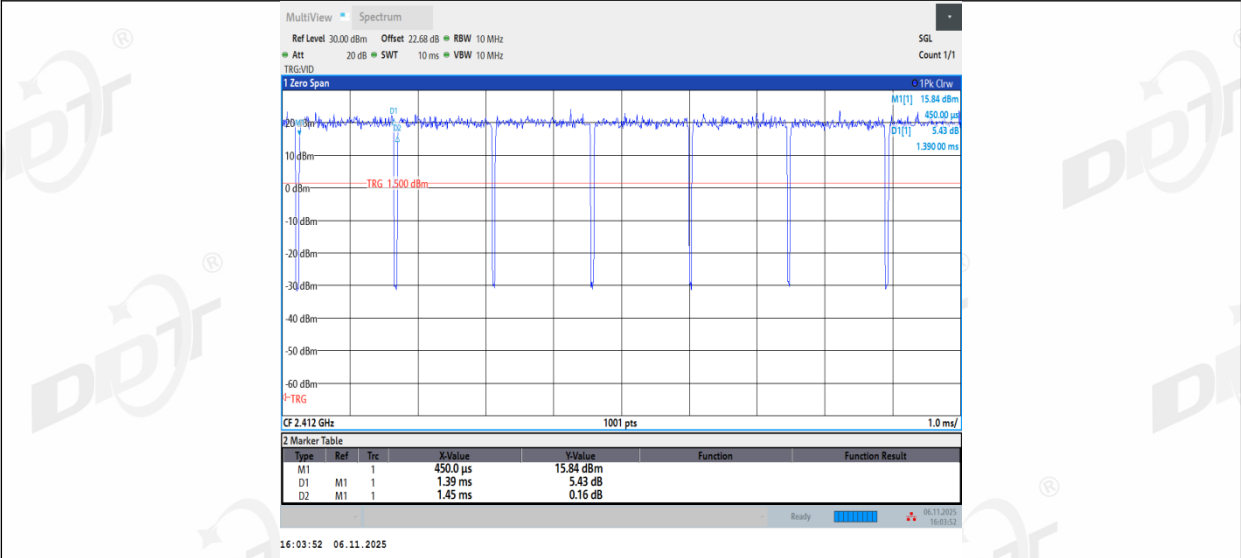
11B_Ant2_2462



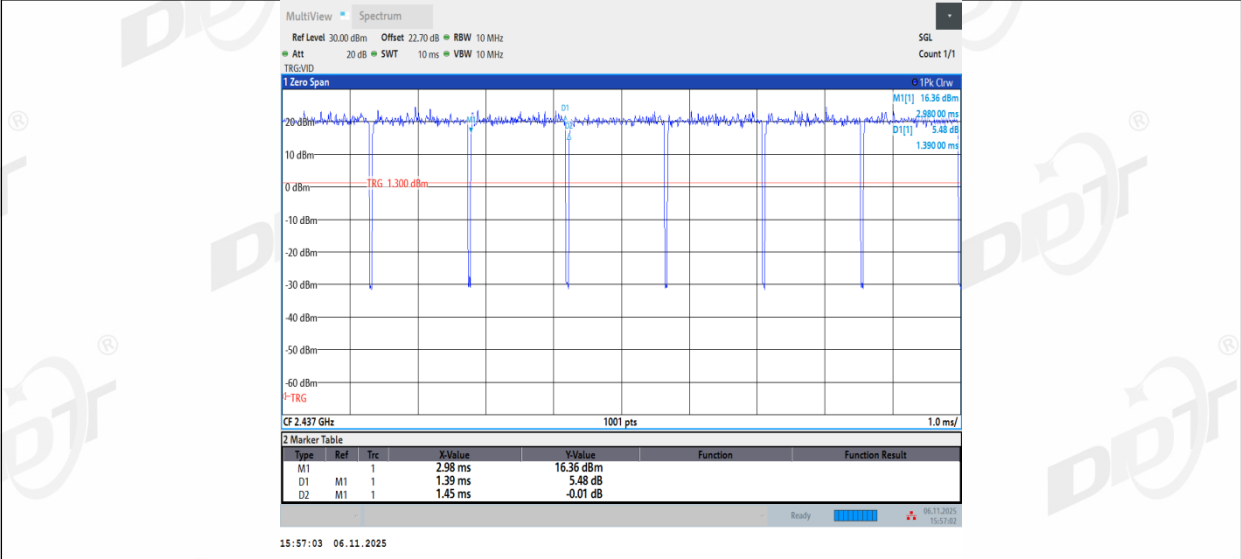
11G_Ant1_2412



11G_Ant2_2412



11G_Ant1_2437

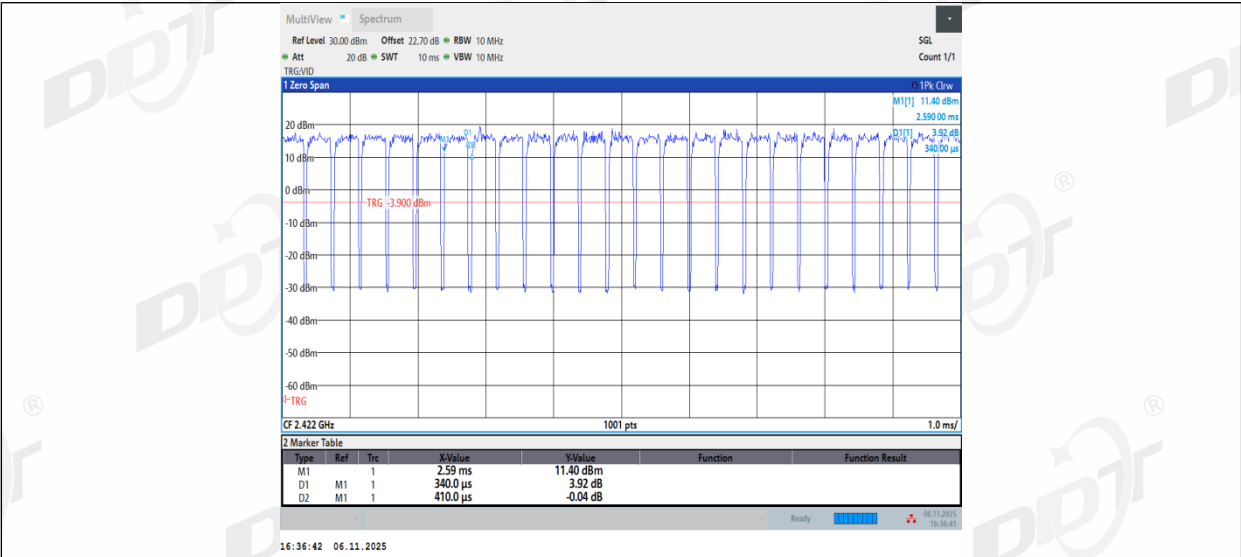


11G_Ant2_2437

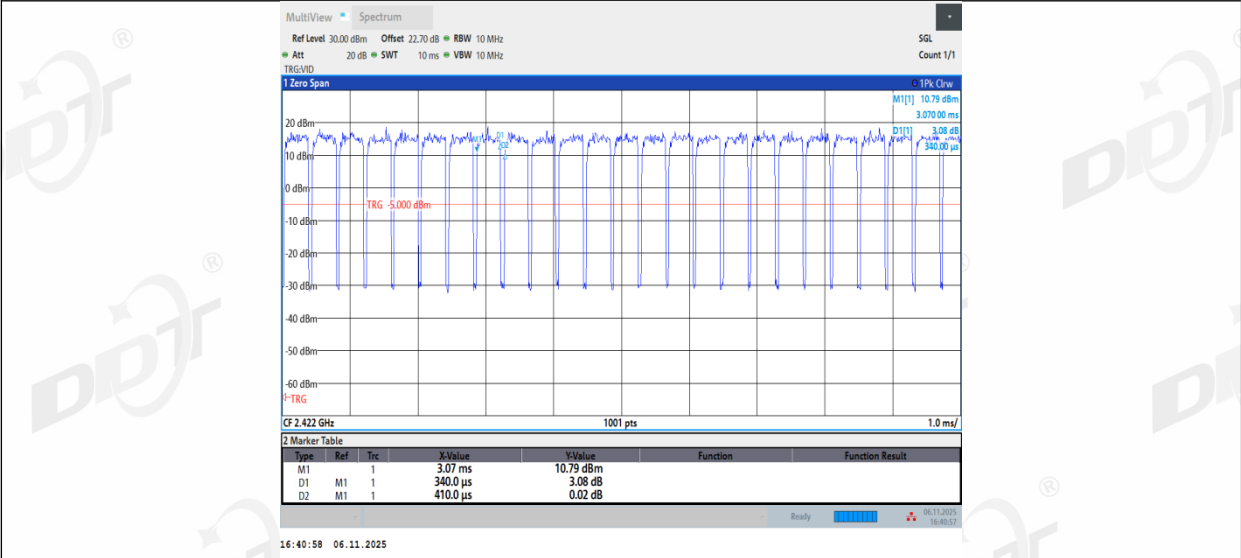




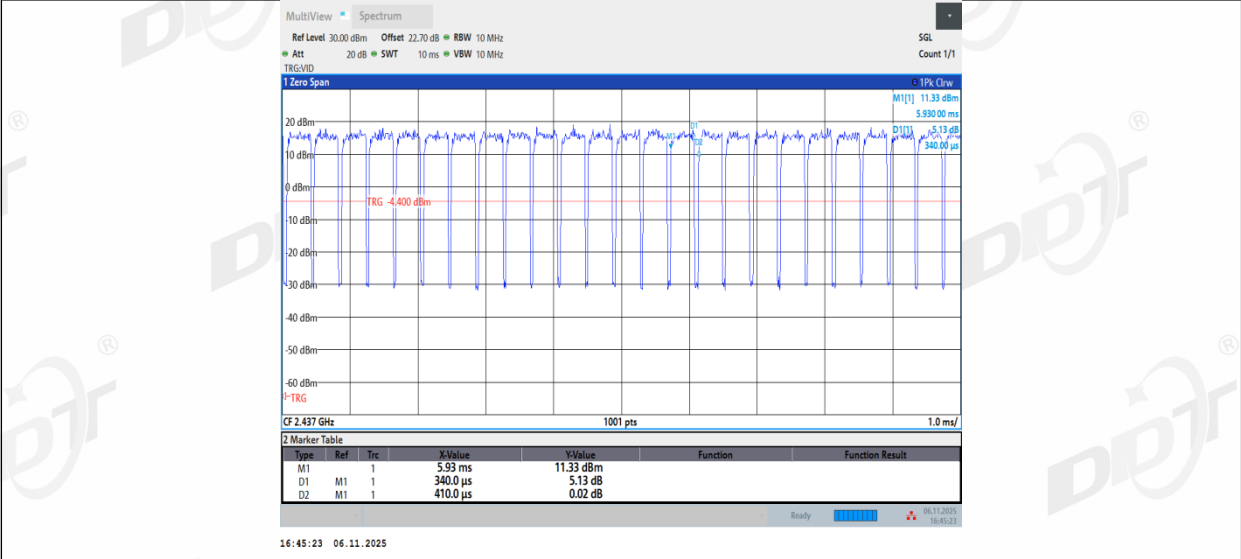




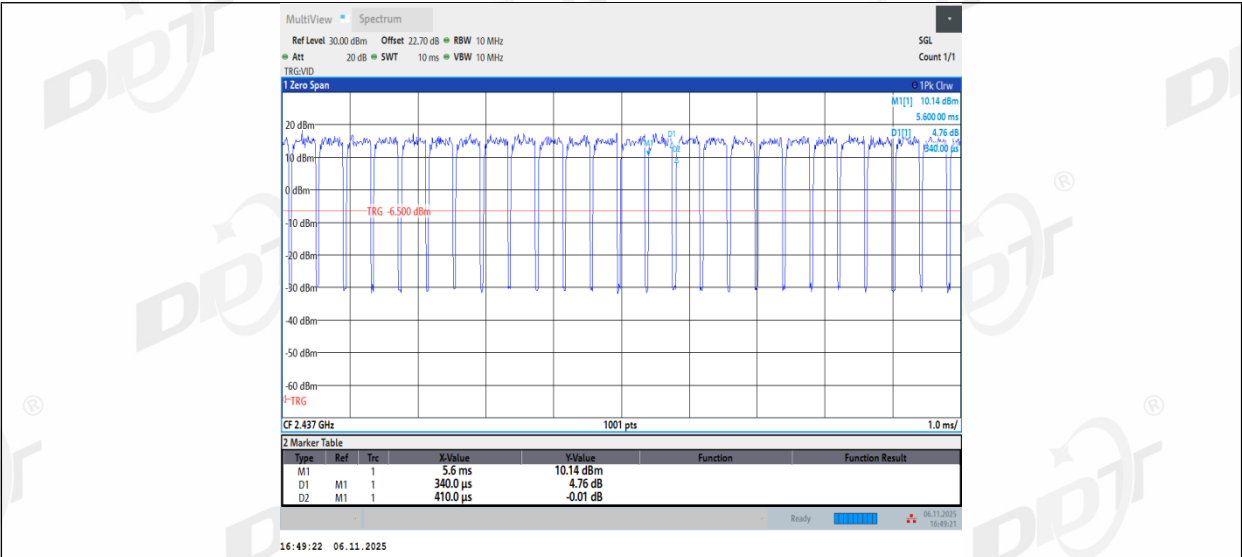
11N40MIMO_Ant2_2422



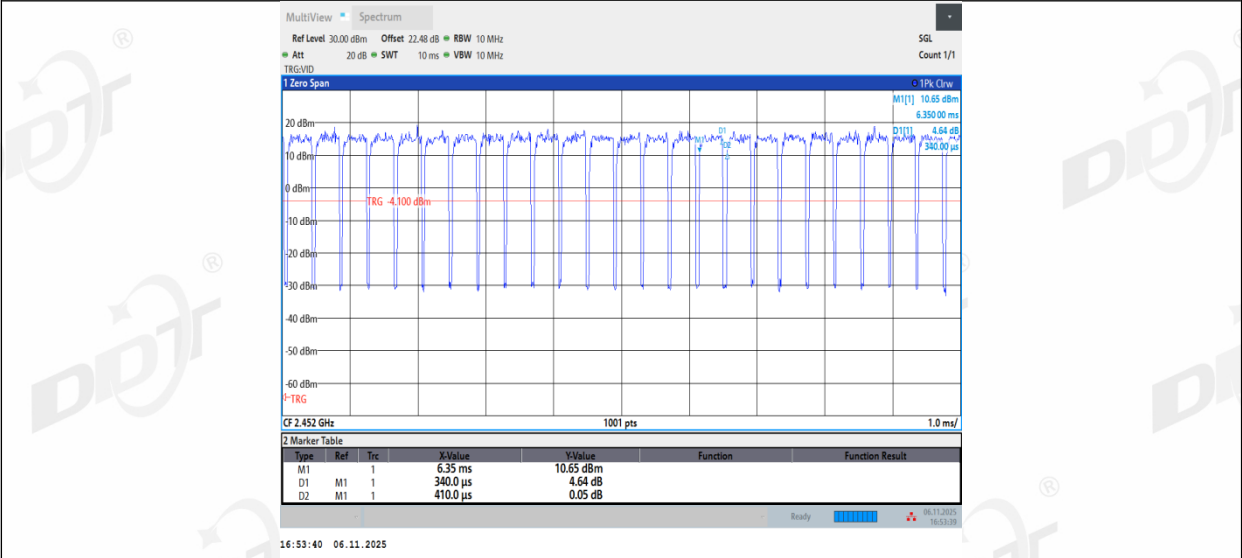
11N40MIMO_Ant1_2437



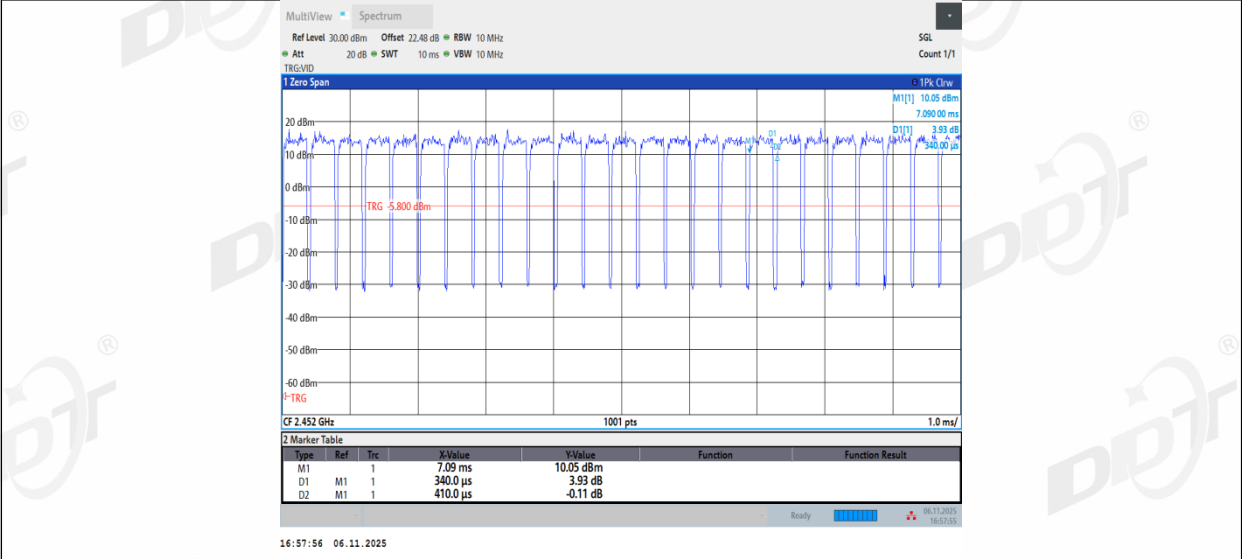
11N40MIMO_Ant2_2437



11N40MIMO_Ant1_2452



11N40MIMO_Ant2_2452



11AX20MIMO_Ant1_2412

















11. Antenna Requirements

11.1. Limit

For intentional device, according to FCC 47 CFR Section 15.203, an intentional radiator shall be designed to ensure that no antenna other than that furnished by the responsible party shall be used with the device. And according to FCC 47 CFR Section 15.247 (b), if transmitting antennas of directional gain greater than 6 dBi are used, the power shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi.

For intentional device, according to RSS-Gen issue 5 section 6.8.

The applicant for equipment certification shall provide a list of all antenna types that may be used with the transmitter, where applicable (i.e. for transmitters with detachable antenna), indicating the maximum permissible antenna gain (in dBi) and the required impedance for each antenna. The test report shall demonstrate the compliance of the transmitter with the limit for maximum equivalent isotropically radiated power (e.i.r.p.) specified in the applicable RSS, when the transmitter is equipped with any antenna type, selected from this list.

11.2. Result

The antenna used for this product as Antenna information described in section 2.1 of the report, and there is no other antenna than that furnished by the responsible party shall be used with the device.